

DERWENT-ACC-NO: 1994-239392

DERWENT-WEEK: 199429

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TITLE: Sizing compsn. for fibre reinforcing
composite materials - contains modified epoxy! resin and
water soluble fluoroalkyl cpd. penetrant

PATENT-ASSIGNEE: SUMIKA-HERCULES CO LTD[SUMIN]

PRIORITY-DATA: 1992JP-0350669 (December 4, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
JP 06173170 A	June 21, 1994	N/A
011	D06M 015/55	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP 06173170A	N/A	1992JP-0350669
December 4, 1992		

INT-CL (IPC): D06M015/55, D06M015/643

ABSTRACTED-PUB-NO: JP 06173170A

BASIC-ABSTRACT:

A sizing compsn. for fibres reinforcing composite materials is one contg. as essential components, (1) a modified epoxy resin which is water-soluble or autoemulsifiable in water, and (2) a penetrant consisting of a water-soluble fluoroalkyl cpd. and/or a water-soluble polysiloxane; the penetrant content in the compsn. is 0.05-5.0 wt.% to the modified epoxy resin; a 1 wt.% aq. soln. of

the compsn. has a surface tension of 40 dyne/cm or less at 20 deg. C, and, when the modified epoxy resin is autoemulsifiable in water, the emulsion has an average dia. of the emulsion particles of 0.5 microns or less and contains no emulsion particle having a dia. of 3 micron or greater.

USE/ADVANTAGE - This compsn. is applied to fibre bundles used for reinforcing composite materials, It prevents generation of fluffs and facilitates the fibre bundle processing. It penetrates rapidly and uniformly into bundles of such hydrophobic fibres as carbon fibre, aramid fibre, glass fibre, alumina fibre, etc. The compsn. does not need a toxic or inflammable organic solvent.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: SIZE COMPOSITION FIBRE REINFORCED COMPOSITE
MATERIAL CONTAIN

MODIFIED POLYEPOXIDE RESIN WATER SOLUBLE
FLUOROALKYL COMPOUND
PENETRATE

DERWENT-CLASS: A21 A94 F06

CPI-CODES: A06-A00B; A07-B04; A10-E01; A12-G04; F01-H06A;
F03-D;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

017 ; P0737*R P0635 H0293 F70 D01 D18 ; S9999 S1070*R

Polymer Index [1.2]

017 ; B9999 B3509 B3485 B3372 ; B9999 B5447 B5414 B5403
B5276 ;

K9574 K9483 ; B9999 B5436 B5414 B5403 B5276 ; K9610 K9483
; K9892

; N9999 N7090 N7034 N7023 ; N9999 N7147 N7034 N7023

Polymer Index [2.1]

017 ; P0464*R D01 D22 D42 F47 ; H0226 ; M9999 M2391 ;
S9999 S1025

S1014 ; S9999 S1616 S1605

Polymer Index [2.2]

017 ; P0964*R F34 D01 ; M9999 M2391 ; H0226 ; S9999 S1616
S1605

; S9999 S1025 S1014
 Polymer Index [2.3]
 017 ; B9999 B3521 B3510 B3372 ; Q9999 Q7216 Q7114 ; B9999
 B5209
 B5185 B4740 ; B9999 B5390 B5276 ; K9574 K9483 ; K9518
 K9483 ; K9530
 K9483 ; K9610 K9483 ; ND01 ; ND04 ; N9999 N7147 N7034
 N7023
 Polymer Index [2.4]
 017 ; H0226
 Polymer Index [3.1]
 017 ; P1445*R F81 Si ; S9999 S1616 S1605
 Polymer Index [3.2]
 017 ; Q9999 Q7216 Q7114 ; B9999 B5390 B5276 ; B9999 B3521
 B3510
 B3372 ; K9518 K9483 ; K9530 K9483 ; K9574 K9483 ; K9610
 K9483 ;
 ND01 ; ND04 ; N9999 N7147 N7034 N7023

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0016 0226 0231 1279 1282 1283 1306 1990 2427
 2430 2434 2435 2437
 2440 2499 2504 2509 2524 2575 2649 2651 2662 2718 2723 2724
 2726 2729 3251
 Multipunch Codes: 017 141 151 431 443 445 472 477 481 53& 532
 533 535 017 02&
 04- 147 226 231 397 398 431 436 440 441 443 445 477 532 537
 57- 575 592 593 597
 603 017 02& 04- 05- 229 38- 398 431 440 441 443 445 477 532
 537 57- 597 603

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1994-109703